

CLAIMS

1. Foot-wears, in particular sport foot-wears, comprising a sole (3; 30) of molded synthetic material, said sole (3; 30) having internal stiffening means (4, 5), characterized in that said stiffening means (4, 5) comprises at least a first insert (4) of thread-like form, or anyway of thin and elongated form, having a plurality of intermediate bends (4A), said intermediate bends (4A) defining two or more stretches arranged side by side (4B, 4D), along the development of said first insert (4), said stretches (4B) extending in at least a zone of said sole (3; 30) in a substantially longitudinal direction or in a substantially transverse direction with respect to the sole, depending upon the type of stiffening being desired for said zone.
2. Foot-wears, according to claim 1, characterized in that said first insert (4) comprises at least a first portion (M) in which said stretches arranged side by side (4B) extend mostly in the medial zone of said sole (3; 30), in a longitudinal direction with respect to said sole.
3. Foot-wears, according to claim 2, characterized in that said first insert (4) comprises at least a second portion (A, P) extending in at least one between the front zone and the rear zone of said sole (3; 30), the stretches arranged side by side (4D) of said second portion (A, P) extending substantially in a transverse direction with respect to said sole (3; 30).
4. Foot-wears, according to claim 1, characterized in that said stiffening means (4, 5) comprises at least a second insert (5) of thread-like form, or anyway of thin and elongated form, which is separated from said first insert (4) and positioned in a different zone of said sole (3; 30).
5. Foot-wears, according to claim 1, characterized in

that said second insert (5) has a plurality of intermediate bends (4A) between which there are defined, along the development of said second insert (5), two or more respective stretches arranged side by side (4D).

6. Foot-wears, according to claim 5, characterized in that the stretches arranged side by side (4D) of said second insert (5) extends substantially in a transverse direction with respect to the longitudinal development of said sole (3; 30).

7. Foot-wears, according to at least one of the preceding claims, characterized in that said first insert (4) and/or said second insert (5) has or have a closed development, i.e., without any end.

8. Foot-wears, according to at least one of claims 1 to 6, characterized in that said first insert (4) and/or said second insert (5) has or have bends (4C) in correspondence of the respective ends.

9. Foot-wears, according to at least one of the preceding claims, characterized in that at least some of said bends (4A, 4C) are located in correspondence of studs (3A; 3B) integrated or associated to said sole (3; 30).

10. Foot-wears, according to at least one of the preceding claims, characterized in that said first insert (4) and/or said second insert (5) is or are made of metallic wire, preferably steel.

11. Foot-wears, according to at least one of the preceding claims, characterized in that said sole (3; 30) is a lower sole.

12. Foot-wears, according to at least one of the preceding claims, characterized in that said sole (3; 30) is an intermediate sole.

13. Method for producing foot-wears, in particular sport foot-wears, of the type in which a sole (3; 30)

is associated to an upper (1), the sole being made of molded synthetic material and integrating internal stiffening means (4, 5), characterized in that, in order to obtain said sole (3; 30) there are provided
5 the steps of:

- forming at least a first element (4) of thread-like form, or anyway of thin and elongated form, the first element (4) having a plurality of intermediate bends (4A) between which there are defined, along the
10 development of said first element (4), two or more stretches arranged side by side (4B, 4D);
- inserting the so-obtained first element (4) within a mold envisaged for obtaining the sole (3; 30), in a way that said stretches arranged side by side (4B, 4D) are
15 positioned in a desired zone to be stiffened of the sole (3; 30) to be obtained, said stretches arranged side by side (4B, 4D) being positioned in a substantially longitudinal direction or in a substantially transverse direction with respect to the
20 sole, (3;30), depending upon the type of stiffening being desired for said zone;
- hot injecting said synthetic material within said mold.

14. Method, according to claim 13, characterized in
25 that said first thread-like element (4) is formed so as to have a number of portions (A, M, P), wherein each portion is provided for being positioned in a respective part of said mold, in order to stiffen a corresponding zone of the sole (3; 30) to be obtained.

30 15. Method, according to claim 13, characterized in that the formation is provided of at least a second element (5) of thread-like form, or anyway of thin and elongated form, having a plurality of intermediate bends (4A), wherein between said intermediate bends
35 (4A) there are defined, along the development of said

second element (5), two or more stretches arranged side by side.

16. Method, according to claim 15, characterized in that said second element (5) is inserted within said
5 mold so as that the respective stretches arranged side by side (4D) extend in a substantially transverse direction with respect to the direction of extension of the stretches arranged side by side (4B) of said first element (4).

10 17. Method, according to claim 13, characterized in that said first element (4) is positioned within said mold in such a way that at least some of said bends (4A) are in correspondence of studs (3A, 3B) of the sole (3;30) to be obtained.

15 The foregoing substantially as described and illustrated and for the purposes herein specified.